MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2018/2019

DCS5288 – INTERNET AND WEB PUBLISHING

(All IT Groups)

13 MARCH 2019
2:30 p.m. – 4:30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT:

1. This question paper consists of 12 pages with 2 sections.
2. **SECTION A**: Answer **ALL** Multiple Choice Questions on the OMR sheet given.
3. **SECTION B**: Answer **ALL** Structured Questions in the Answer Booklet provided.

SECTION A (10 Marks)

Instruction: *Answer **ALL** questions from this section and shade your answers on the OMR sheet provided.*

1. Which of the following is **NOT** the advantage of web applications?
   A. Accessible from any internet-enabled computer.
   B. Usable with different operating systems and browser platforms.
   C. Easier to roll out program update since only need to update software on server.
   D. Centralized storage on the client side.

2. _____ wastes bandwidth and difficult to have multiple conversations simultaneously.
   A. Packet switching
   B. Circuit switching
   C. Router switching
   D. Message switching

3. The TCP/IP Internet protocols were originally abstracted as a _____ layer stack.
   A. 3
   B. 4
   C. 5
   D. 6

4. Which of the following is **FALSE** about static website?
   A. It is suitable for the contents that never or rarely need to be updated.
   B. Dynamic functionality has to be added separately.
   C. Involves database design.
   D. Maintaining large numbers of static pages as files can be impractical without automated tools.

5. Which of the following syntax is **CORRECT** to define an email link?
   A. `<a href="abc@gmail.com"> My email address </a>`
   B. `<a href_mail="abc@gmail.com"> My email address </a>`
   C. `<a href="mail:abc@gmail.com"> My email address </a>`
   D. `<a href="mailto:abc@gmail.com"> My email address </a>`

6. _____ attribute for the <form> tag provides Uniform Resource Locator (URL) or location of the server-side script that will process the data.
   A. `action`
   B. `name`
   C. `type`
   D. `location`

7. The smallest heading of HTML tag is _____.
   A. `<h7> </h7>`
   B. `<h6> </h6>`
   C. `<h1> </h1>`
   D. `<small> </small>`

8. Which of the following is **NOT** a HTML tag for definition list?
   A. `<di> </di>`
   B. `<dl> </dl>`
   C. `<dd> </dd>`
   D. `<dt> </dt>`

Continued...

9. Which of the following are the valid `color` values in CSS?

i.	RGB values	iii.	Colour names
ii.	Hexadecimal values	iv.	Opacity values
A.	i, ii and iii	C.	ii, iii and iv
B.	i, ii and iv	D.	All of the above

10. A CSS document consists of:

i.	Type	iii.	Value
ii.	Selector	iv.	Property
A.	i, ii and iii	C.	ii, iii and iv
B.	i, ii and iv	D.	All of the above

11. _____ should only be used when referencing a single HTML element.

A.	Id selector	C.	Universal selector
B.	Class selector	D.	Single selector

12. Which of the following is the correct sequence in defining the position of margin?
    A. Top, left, bottom, right
    B. Top, right, bottom, left
    C. Top, bottom, right, left
    D. Top, bottom, left, right

13. _____ data type in JavaScript can only have two possible values that is true or false.

A.	String	C.	Number
B.	Boolean	D.	Null Array

14. Which of the following escape sequence can be used to display separate line strings in alert box?

A.	`\n`	C.	` `
B.	`/n`	D.	`<p>`

15. When the browser's JavaScript engine encounters an error, it will throw an _____ which can interrupt the regular, sequential execution of the program.

A.	Block	C.	Debugger
B.	Exception	D.	Statement

16. In JavaScript, to set the decimal places of the variable, number to **4**, which of the following can be used?

A.	`number.toFixed(4);`	C.	`number.decimal(4);`
B.	`number.ceil(4);`	D.	`number.format(4);`

17. A web server has many responsibilities, **EXCEPT**:
    A. Managing database connections
    B. Encrypting and compressing data
    C. Separating the content from the appearance.
    D. Handling Transmission Control Protocol (TCP) connections

Continued...

18. In PHP, if the URL sent to the server looks like the one shown below. Which form method was used to create the form?

```
http://localhost/assign1/newuser?user=lindapass=abc1
```

A. Response
B. Retrieve
C. Get
D. Post

19. `$_REQUEST` in PHP can be used for _____.
A. Get method only
B. Post method only
C. Both post and get methods
D. None of the above

20. What does `isset()` function do in PHP?
A. It checks whether variable is set or not.
B. It checks whether variable is free or not.
C. It checks whether variable is string or integer.
D. None of the above.

Continued...

SECTION B (40 Marks)

Instruction: *Answer **ALL** questions from this section in the Answer Booklet provided.*

Question 1 – HTML (10 Marks)

(a) Write the complete HTML codes for the table shown below. [7 marks]

- The table title is Nutrition Facts for Crackers.

SAMPLE OUTPUT

Nutrition Facts for Crackers

Nutrition Facts			
Per 9 crackers (23g)		**Amount per Serving**	**% Daily value**
Calories		90	NA
Fat	Saturated	2.5	
	Trans	0	
Eat clean!			

Figure 1: Sample output

(b) Write the HTML codes to produce the output as shown below. [3 marks]

SAMPLE OUTPUT

III. Protein
IV. Type of Vitamins:
    a. Water Soluble Vitamins
        - Vitamin B1
        - Vitamin B2
    b. Fat Soluble Vitamins
V. Calcium

Figure 2: Sample output

Continued...

Question 2 – CSS (10 Marks)

(a) Write the External CSS codes based on the given HTML codes. [6 marks]

```
<div id="main">

   <div id="box1">
   <img src="apple.png">
   <h2>Health &amp; Wellbeing </h2>
   </div>

   <div id="box2">
   <p> Accountable and efficient</p>
   <p> Based on the determinants of health</p>
   <p> Community Governed</p>
   </div>
</div>
```

Figure 3: HTML code snippet

- All the elements in this webpage will have a padding of 20px.
- The *main* id:
  - Has a rounded-edge border of 10px.
  - The border is blue and 2px in width with double straight line.
  - Auto display the scrollbar if the overflow is clipped.
- The *box1* id:
  - Has a rounded-edge border of 15px.
  - The width is 200px.
  - The border is red and 5px in width with dashed line.
  - Float the element to the left.
- Heading 2 inside the div:
  - The blur radius of black shadow is 15px with 7px vertical value.
- Image inside the div:
  - Set the image width and height to 100px.
- The *box2* id:
  - Set the left margin of 10px.
  - Float the element to left.
- All paragraphs in the *box2* id:
  - Capitalize the text.
  - Overline and bold the text.
  - Use "Verdana" font.
  - The spacing of each letter is 5px.

SAMPLE OUTPUT

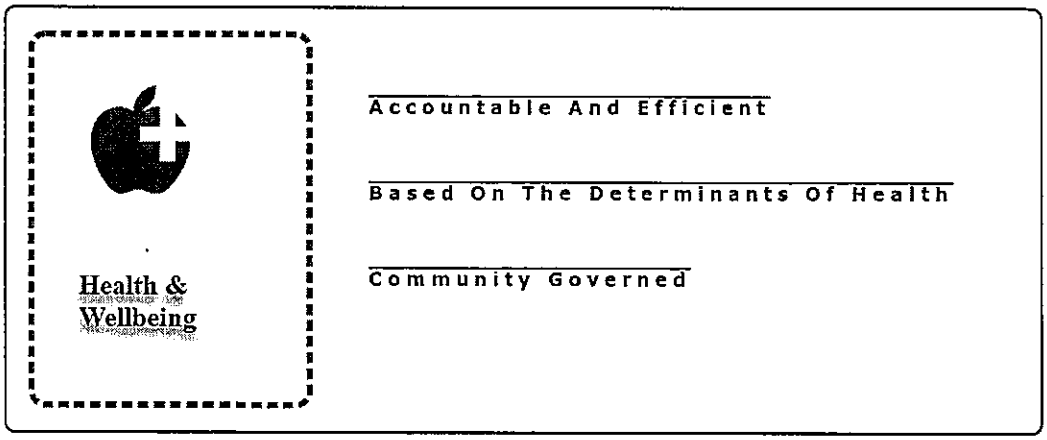

Figure 4: Sample output

Continued...

(b) Write the Internal CSS codes based on the given HTML codes. [4 marks]

```
<body>
<p class="cyber"><span class="redLine">Cyberjaya Campus:</span>
As part of TM&rsquo;s initiative to further develop the ICT industry in the nation
as a whole.....
</p>

<p class="melaka"><span class="redLine">Malacca Campus:</span>
The campus stands on a 52-acre piece of land strategically located in the vicinity
of serene residential areas.....
</p>
 </body>
```

Figure 5: HTML code snippet

- Paragraph:
  - The background color is lightblue.
  - The border is 1px in width and a solid black line.
  - Has a width and height of 40% and 150px respectively.
  - Content is clipped but the scrollbar will always appear.
- The *cyber* class:
  - Use absolute position, set the position to left 5% and top 5% respectively.
- The *melaka* class:
  - Use absolute position, set the position to left 55% and top 5% respectively.
- The *redLine* class:
  - Enlarge the font to 1.5 times default font size.
  - The text colour is red.
  - Underline the text.

SAMPLE OUTPUT

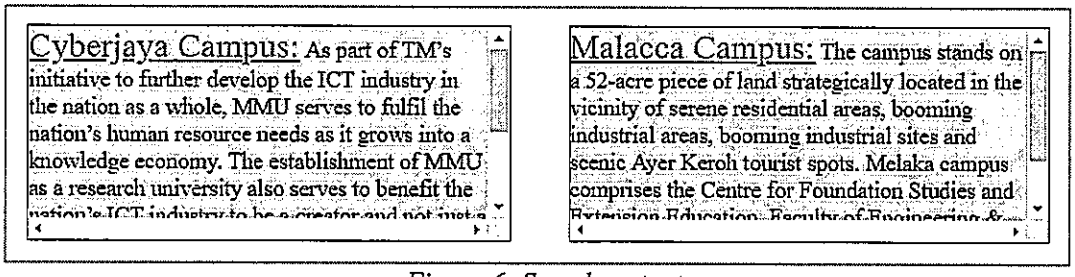
Cyberjaya Campus: As part of TM's initiative to further develop the ICT industry in the nation as a whole, MMU serves to fulfil the nation's human resource needs as it grows into a knowledge economy. The establishment of MMU as a research university also serves to benefit the
Malacca Campus: The campus stands on a 52-acre piece of land strategically located in the vicinity of serene residential areas, booming industrial areas, booming industrial sites and scenic Ayer Keroh tourist spots. Melaka campus comprises the Centre for Foundation Studies and

Figure 6: Sample output

Continued...

Question 3 – JAVACSRIPT (10 Marks)

This program will calculate total donation amount based on user selection. The descriptions and outputs are shown below.

A form named "*donation*" has the following elements.

```
<h3>Children Charity </h3>
<form name="donation">

<p>Donated by: <input type="text" name="donor">
<br> <i><span id="name_display">   </span></i>
</p>

<p>IC: <input type="text" name="ic">
<br> <i><span id="ic_display">   </span></i>
</p>

<p>Your monthly donation could pay for :
<br><input type="checkbox" name="area" value="A">Plan A: Medication RM 10
<br><input type="checkbox" name="area" value="B">Plan B: Scholarship RM 20
<br><input type="checkbox" name="area" value="C" >Plan C: Meals RM 30
</p>

<p> 6 or 12 months:
<select name="frequency">
<option value="6">6 Months </option>
<option value="12">12 Months </option>
</select>
</p>

<p><input type="button" name="sub_btn" value="Donate" onclick="check()"> </p>

<p><b><span id="display">   </span></b> </p>

</form>
```

Figure 7: HTML code snippet

(a) Write the JavaScript codes for the *check()* function to validate the inputs provided by user. [4 marks]

- When the button "*Donate*" is clicked, *check()* will be called.
- In function *check()*:
    - Declare all the necessary variables.
    - Get the donor's name and IC number from the form.
    - Donor's name must not be null and it must be letter. Otherwise an error message "*Please enter a valid name*" will be displayed by using inner HTML property.
    - IC number must not be null and it must be digit. The length of the IC must be 12 digits. Otherwise an error message "*Please enter a valid IC*" will be displayed by using inner HTML property.
    - If all values from the form are valid, call function *get_total(...)* by passing donor's name and IC number.

(b) Write the JavaScript codes for *get_total(...)* to calculate the total donation amount based on the type of plans and period selected by user. [6 marks]

- In function *get_total(...)*:
    - Declare all the necessary variables.
    - Get the plans and frequency from the form.

Continued...

- Using a *for* loop:
  - Identify whether each checkbox is checked.
  - If the checkbox is checked, add the plan's value into an array.
- Using a *while* loop:
  - Use a *switch case* statement to determine the donation amount of plans selected.

Table 1: Plans and donation amount

Plans	(RM)
Plan A: Medication	10.00
Plan B: Scholarship	20.00
Plan C:Meals	30.00

- Calculate the total donation amount based on the frequency selected.
- Display the donor's name, IC number, total of donation amount and plans selected using inner HTML property as shown in the sample output.

SAMPLE OUTPUT

- If the user key in the invalid input.

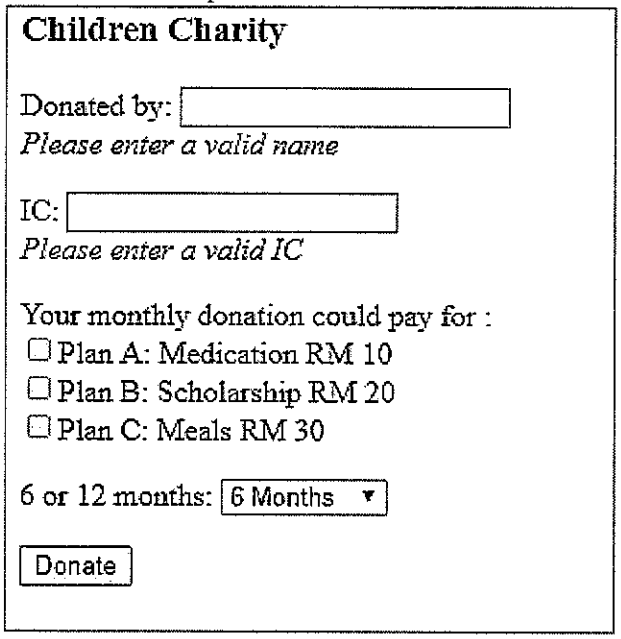

Figure 8: Sample output if user key in invalid input

- If the user fills out the information and clicks on the "Donate" button, the relevant information will be displayed.

Continued...

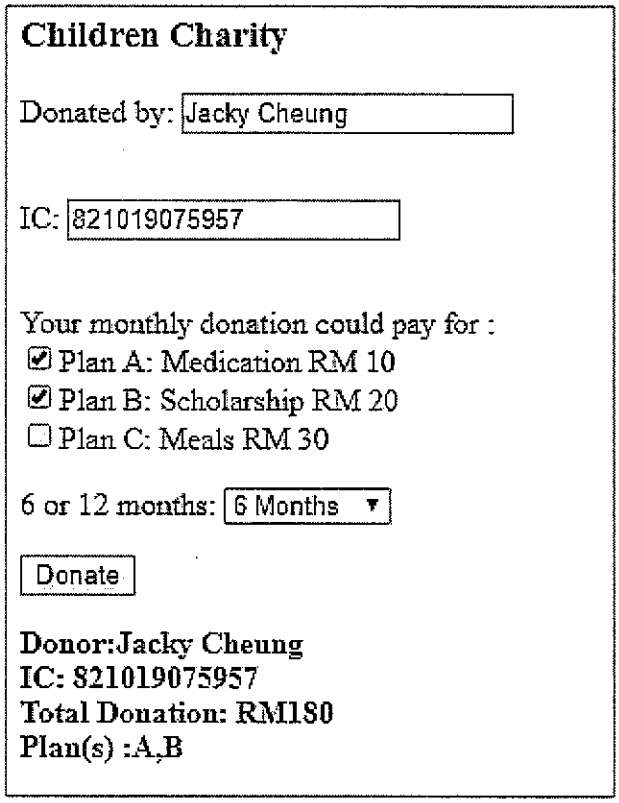

Figure 9: Sample output if user chooses 6 months with 2 plans

- If the user fills out the information and clicks on the "Donate" button, the relevant information will be displayed.

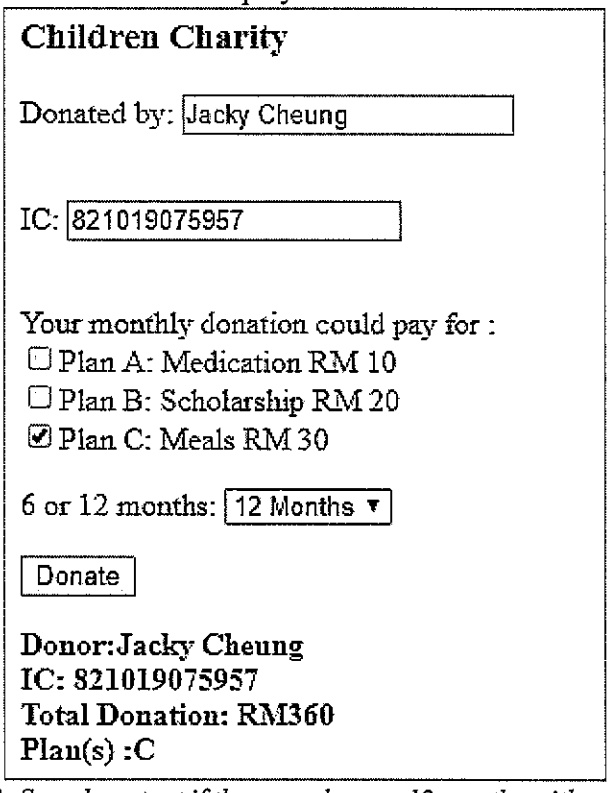

Figure 10: Sample output if the user chooses 12 months with only 1 plan.

Continued...

Question 4 – PHP (10 Marks)

Tables below are the database tables for a simple quiz system. Each table shows attribute name and records that already exist in the database.

Table 2: test

testID	testName
1	Quiz 1
2	IWP Final Quiz
3	Grammar Quiz

Table 3: question

quesID	quesQuestion	quesAnsA	quesAnsB	quesAnsC	quesAnsD	quesAnswer	testID
1	I _____ tennis every Sunday morning	playing	play	am playing	am play	B	1
2	How many students in your class _____ from Penang?	comes	come	came	are coming	B	1
3	Equipment needed to allow computers to connect to Internet is called _____.	Modem	Telephone	Television	None of the above	A	2
4	IPv6 addresses have size of _____ bits.	32	64	128	265	C	2
5	Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?	CDMA	CSMA/CA	ALOHA	None of the above	B	2
6	I don't have ____ much time for reading as I would like to.	as	more	so	Too	A	3
7	My students' sleepless nights became _____ frequently as the finals approached.	so	more	as	much more	B	3

(a) Create a complete PHP code page named *connect.php* page which configure the connection to the database *quiz*. The information are given as below:

- Server name: localhost
- MySQL username: root
- MySQL password: " "
- Database name: quiz

If the connect is successfully established, select the database, otherwise, display the error message. [2 marks]

Continued...

(b) Figure below shows a page named *viewAllQuiz.php*. It lists all the tests and the total number of questions of each test from the database. There are two actions that can be performed to each of the test: view all questions and delete the test.

No.	Test Name	Total Questions	Actions	
1	Quiz 1	2	VIEW QUESTIONS	DELETE
2	IWP Final Quiz	3	VIEW QUESTIONS	DELETE
3	Grammar Quiz	2	VIEW QUESTIONS	DELETE

Figure 11: viewAllQuiz.php

viewQuestion.php?testID=3

When a user click on the action "VIEW QUESTIONS", it links to *viewQuestion.php* to display all questions of that particular test as shown below. Note that the link is a hyperlink that carries test's ID information. Write a complete PHP code page *viewQuestion.php* to display the questions. Remember that you need to include the *connect.php* in order to be able to access the database.

[6 marks]

A header size of 2 that display the test's name.

TEST NAME : Grammar Quiz

1.	I don't have ____ much time for reading as I would like to.
	A. as
	B. more
	C. so
	D. too
	ANSWER A

2.	My students' sleepless nights became _____ frequently as the finals approached.
	A. so
	B. more
	C. as
	D. much more
	ANSWER B

Figure 12: viewQuestion.php

Display one question by using one table.

Continued...

(c) In *viewAllQuiz.php* page, when a user clicked on the action "DELETE", it links to the same page by carries the test's ID and a variable *del*. The clicked test and all questions belong to the test will be removed from the database. When the deletion is done, the page will automatically heading back to *viewAllQuiz.php*. Write only the PHP code that delete the selected test and questions from database.

[2 marks]

No.	Test Name	Total Questions	Actions	
1	Quiz 1	2	VIEW QUESTIONS	DELETE
2	IWP Final Quiz	3	VIEW QUESTIONS	DELETE
3	Grammar Quiz	2	VIEW QUESTIONS	DELETE

Figure 13: viewAllQuiz.php

viewAllQuiz.php?testID=3&del

End of Page.